

# TRANSMITTAL FORM

*to be used for all correspondence after initial filing)*

Total Number of Pages in This Submission

10

Application Number

10/046,442

Filing Date

October 27, 2001

First Named Inventor

Wagner, Peter

Art Unit

1641

Examiner Name

Chin, Christopher L.

Attorney Docket Number

020144-001970US

## ENCLOSURES (Check all that apply)

☐ Fee Transmittal Form

☐ Fee Attached

☐ Amendment/Reply

☐ After Final

☐ Affidavits/declaration(s)

☐ Extension of Time Request

☐ Express Abandonment Request

☒ Information Disclosure Statement

☐ Certified Copy of Priority Document(s)

☐ Response to Missing Parts/Incomplete Application

☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Drawing(s)

☐ Licensing-related Papers

☐ Petition

☐ Petition to Convert to a Provisional Application

☐ Power of Attorney, Revocation Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD, Number of CD(s)

☐ After Allowance Communication to Group

☐ Appeal Communication to Board of Appeals and Interferences

☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☒ Other Enclosure(s) (please identify below):

Return Postcard

Cited References

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual

Townsend and Townsend and Crew LLP

Patrick R. Jewik

Reg. No. 40,456

Signature

Date

1/21/04

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Landon Clark

Signature

Landon Clark

Date

1-22-04

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180

Complete if Known

Application Number 10/046,442  
 Filing Date October 27, 2001  
 First Named Inventor Wagner, Peter  
 Examiner Name Chin, Christopher L.  
 Art Unit 1641  
 Attorney Docket No. 020144-001970US

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:Deposit  
Account  
Number

20-1430

Deposit  
Account  
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		Extra Claims		Fee from below		Fee Paid
	**		**			
Independent Claims						
Multiple Dependent						

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	180
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$180)

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type) Patrick R. Jewik Registration No. (Attorney/Agent) 40,456 Telephone 415-576-0200  
 Signature Date January 22, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

PATENT  
Attorney Docket No.: 020144-001970US

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TOWNSEND and TOWNSEND and CREW LLP

By: London Clark

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

WAGNER et al.

Application No.: 10/046,442

Filed: October 27, 2001

For: NON-SPECIFIC BINDING  
RESISTANT PROTEIN ARRAYS AND  
METHODS FOR MAKING THE SAME

Examiner: Chin, Christopher L.

Art Unit: 1641

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08 are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of references AA-CI, DC-DT and EH-GM can be found in Application No. 09/115,455, filed July 14, 1998 now US Patent 6,406,921 B1 issued June 18, 2002 (Attorney Docket No. 020144-001900US). Copies of references CJ-DB, DU-GE and GN are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

01/28/2004 HROCHA1 00000038 201438 10046442

01 FC:1006

100.00 DA

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Patrick R. Jewik', written over a horizontal line.

Patrick R. Jewik  
Reg. No. 40,456

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 415-576-0200  
Fax: 415-576-0300  
PRJ/lle



Substitute for form 1449B/A

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 8

**Complete if Known**

Application Number	10/046,442
Filing Date	October 27, 2001
First Named Inventor	Wagner, Peter
Art Unit	1641
Examiner Name	Chin, Christopher L.
Attorney Docket Number	020144-001970US

**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-4,071,409	01-31-1978	Messing et al.	
	AB	US-4,562,157	12-31-1985	Lowe et al.	
	AC	US-4,690,715	09-01-1987	Allara et al.	
	AD	US-4,722,896	02-02-1988	Kadish et al.	
	AE	US-4,908,112	03-13-1990	Pace	
	AF	US-4,973,493	11-27-1990	Guire	
	AG	US-4,987,032	01-22-1991	Tsutomu et al.	
	AH	US-5,079,600	01-07-1992	Schnur et al.	
	AI	US-5,096,807	03-17-1992	Leaback	
	AJ	US-5,143,854	09-01-1992	Pirung et al.	
	AK	US-5,154,808	10-13-1992	Miyasaka, et al.	
	AL	US-5,160,597	11-03-1992	Colapicchioni et al.	
	AM	US-5,242,828	09-07-1993	Bergstrom et al.	
	AN	US-5,252,743	10-12-1993	Barrett et al.	
	AO	US-5,294,369	03-15-1994	Shigekawa et al.	
	AP	US-5,296,114	03-22-1994	Manz	
	AQ	US-5,304,487	04-19-1994	Wilding et al.	
	AR	US-5,342,692	08-30-1994	Ribi	
	AS	US-5,384,261	01-24-1995	Winkler et al.	
	AT	US-5,405,766	04-11-1995	Kallury et al.	
	AU	US-5,405,783	04-11-1995	Pirung et al.	
	AV	US-5,412,087	05-02-1995	McGall et al.	
	AW	US-5,429,708	07-04-1995	Linford et al.	
	AX	US-5,441,876	08-15-1995	Singh	
	AY	US-5,445,934	08-29-1995	Fodor et al.	
	AZ	US-5,472,881	12-05-1995	Beebe et al.	
	BA	US-5,510,270	04-23-1996	Fodor et al.	
	BB	US-5,512,131	04-30-1996	Kumar et al.	
	BC	US-5,512,492	04-30-1996	Herron et al.	
	BD	US-5,514,501	05-07-1996	Tarlov	
	BE	US-5,520,787	05-28-1996	Hanagan et al.	
	BF	US-5,571,410	11-05-1996	Swedberg et al.	
	BG	US-5,593,838	01-14-1997	Zanzucchi et al.	
	BH	US-5,603,351	02-18-1997	Cherukuri et al.	
	BI	US-5,605,662	02-25-1997	Heller et al.	
	BJ	US-5,620,850	04-15-1997	Bamdad et al.	
	BK	US-5,622,826	04-22-1997	Varma	
	BL	US-5,624,711	04-29-1997	Sundberg et al.	
	BM	US-5,629,213	05-13-1997	Komguth et al.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08 (08-03)

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet **2** of **8****Complete if Known**

Application Number	10/046,442
Filing Date	October 27, 2001
First Named Inventor	Wagner, Peter
Art Unit	1641
Examiner Name	Chin, Christopher L.
Attorney Docket Number	020144-001970US

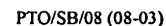
**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	BN	US-5,635,358	06-03-1997	Wilding et al.	
	BO	US-5,637,469	06-10-1997	Wilding et al.	
	BP	US-5,677,195	10-14-1997	Winkler et al.	
	BQ	US-5,677,196	10-14-1997	Herron et al.	
	BR	US-5,681,484	10-28-1997	Zanzucchi et al.	
	BS	US-5,688,642	11-18-1997	Chrissey et al.	
	BT	US-5,700,643	12-23-1997	Monforte et al.	
	BU	US-5,719,060	02-17-1998	Hutchens et al.	
	BV	US-5,726,026	03-10-1998	Wilding et al.	
	BW	US-5,731,152	03-24-1998	Maracas et al.	
	BX	US-5,744,305	04-28-1998	Fodor et al.	
	BY	US-5,766,908	06-19-1998	Klein et al.	
	BZ	US-5,776,674	07-07-1998	Ulmer	
	CA	US-5,837,832	11-17-1998	Chee et al.	
	CB	US-5,843,767	12-01-1998	Beattie	
	CC	US-5,858,188	01-12-1999	Soane et al.	
	CD	US-5,861,242	01-19-1999	Chee et al.	
	CE	US-5,866,345	02-02-1999	Wilding et al.	
	CF	US-5,919,523	07-06-1999	Sundberg et al.	
	CG	US-5,925,552	07-20-1999	Keogh et al.	
	CH	US-5,928,880	07-27-1999	Wilding et al.	
	CI	US-5,942,443	08-24-1999	Parce et al.	
	CJ	US-5,424,186	06-13-1995	Fodor et al.	
	CK	US-5,665,582	09-09-1997	Kausch, et al.	
	CL	US-5,700,642	12-23-1997	Monforte et al.	
	CM	US-5,851,840	12-22-1998	Sluka et al.	
	CN	US-6,066,448	05-23-2000	Wohlstadter, et al.	
	CO	US-6,090,545	07-18-2000	Wohlstadter, et al.	
	CP	US-6,140,045	10-31-2000	Wohlstadter, et al.	
	CQ	US-6,197,599 B1	03-06-2001	Chin, et al.	
	CR	US-6,329,209 B1	12-11-2001	Wagner et al.	
	CS	US-6,365,418 B1	04-02-2002	Wagner et al.	
	CT	US-6,406,840	06-18-2002	Li et al.	
	CU	US-6,406,921 B1	06-18-2002	Wagner et al.	
	CV	US-6,454,924 B2	09-24-2002	Jedrzejewski et al.	
	CW	US-6,475,808 B1	11-05-2002	Wagner et al.	
	CX	US-6,475,809 B1	11-05-2002	Wagner et al.	
	CY	US-6,576,478 B1	06-10-2003	Wagner et al.	

Examiner  
SignatureDate  
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO

**(use as many sheets as necessary)**

Sheet	3	of	8
-------	---	----	---

**Complete if Known**

<i>Application Number</i>	10/046,442
<i>Filing Date</i>	October 27, 2001
<i>First Named Inventor</i>	Wagner, Peter
<i>Art Unit</i>	1641
<i>Examiner Name</i>	Chin, Christopher L.
<i>Attorney Docket Number</i>	020144-001970US

## U.S. PATENT DOCUMENTS+

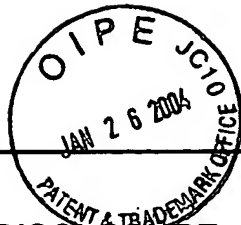
[illegible]

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO			<b>C mplete if Kn wn</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	10/046,442	
			Filing Date	October 27, 2001	
			First Named Inventor	Wagner, Peter	
			Art Unit	1641	
			Examiner Name	Chin, Christopher L.	
Sheet	4	of	8	Attorney Docket Number	020144-001970US

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	DC	WO	93/21528		10-28-1993	Lang, et al.		<input type="checkbox"/>
	DD	WO	98/50773		11-12-1998	Univ. Minnesota		<input type="checkbox"/>
	DE	WO	95/35505		12-28-1995	Brown, et al.		<input type="checkbox"/>
	DF	WO	96/02830		02-01-1996	Sartore, et al.		<input type="checkbox"/>
	DG	WO	96/10178		04-04-1996	Loefaas		<input type="checkbox"/>
	DH	WO	96/26432		08-29-1996	Reichert, et al.		<input type="checkbox"/>
	DI	WO	96/29629		09-26-1996	Jackman, et al.		<input type="checkbox"/>
	DJ	WO	96/38726		12-05-1996	Heyse, et al.		<input type="checkbox"/>
	DK	WO	96/39937		12-19-1996	Ferrari, et al.		<input type="checkbox"/>
	DL	WO	97/07429		02-27-1997	Whitesides, et al.		<input type="checkbox"/>
	DM	WO	97/36681		10-09-1997	Winn-Deen, et al.		<input type="checkbox"/>
	DN	WO	97/41424		11-06-1997	Hodges, et al.		<input type="checkbox"/>
	DO	WO	97/41425		11-06-1997	Hodges, et al.		<input type="checkbox"/>
	DP	WO	98/23948		06-04-1998	Boxer, et al.		<input type="checkbox"/>
	DQ	WO	99/40434		08-12-1999	Nasoff, et al.		<input type="checkbox"/>
	DR	WO	00/52209		09-08-2000	Fantl, et al.		<input type="checkbox"/>
	DS	WO	00/53625		09-14-2000	Montgomery, et al.		<input type="checkbox"/>
	DT	WO	00/54046		09-14-2000	Ge		<input type="checkbox"/>
								<input type="checkbox"/>
	DU	DE	3939973		06-06-1991	Ahlers, et al.		<input type="checkbox"/>
	DV	DE	19543232		05-15-1997	Ermantraut, et al.		<input type="checkbox"/>
	DW	EP	596421		05-11-1994	Barner, et al.		<input type="checkbox"/>
	DX	EP	780423		06-25-1997	Ringsdorf, et al.		<input type="checkbox"/>
	DY	JP	2272081		11-06-1990	Fuji Photo Film Co Ltd		<input type="checkbox"/>
	DZ	JP	6041183		02-15-1994	Debitsudo		<input type="checkbox"/>
	EA	JP	7084372		03-31-1995	Ichinose		<input type="checkbox"/>
	EB	WO	91/16425		10-31-1991	Sigrist, et al.		<input type="checkbox"/>
	EC	WO	95/08770		03-30-1995	Seeger, et al.		<input type="checkbox"/>
	ED	WO	97/21094		06-12-1997	Van Gerwen, et al.		<input type="checkbox"/>
	EE	WO	97/33737		09-18-1997	Whitesides, et al.		<input type="checkbox"/>
	EF	WO	98/39481		09-11-1998	Anderson, et al.		<input type="checkbox"/>
	EG	WO	98/43086		10-01-1998	Everhart, et al.		<input type="checkbox"/>
								<input type="checkbox"/>

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08 (08-03)

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 5 of 8

**Complete if Known**

Application Number	10/046,442
Filing Date	October 27, 2001
First Named Inventor	Wagner, Peter
Art Unit	1641
Examiner Name	Chin, Christopher L.
Attorney Docket Number	020144-001970US

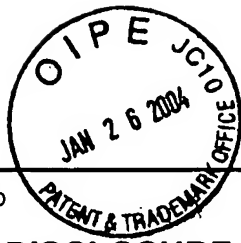
**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	EH	Becker et al. "Fabrication of microstructures with high aspect ratios and great structural heights by synchrotron radiation lithography, galvanofarming, and plastic moulding (LIGA process)" Microelectronic Engineering 4:35-56 (1986).	
	EI	Becker et al. "Production of separation -nozzle systems for uranium enrichment by a combination of x-ray lithography and galvanoplastics" Naturwissenschaften 69:520-523 (1982).	
	EJ	Cha et al. Expression of fused protein, human interleukin-2 and green fluorescent protein, in insect larvae. Annual Meeting of The American Institute of Chemical Engineers, Los Angeles, CA, Nov. 1997.*	
	EK	Cload et al., "Development of improved tRNAs for in vitro biosynthesis of proteins containing unnatural amino acids," Chemistry and Biology, 3:1033-1038 (1996).	
	EL	Colliod et al. "Oriented and covalent immobilization of target molecules to solid supports" Synthesis and application of a light-activatable and thiol-reactive cross-linking reagent Bioconjugate Chem. 4:528-536 (1993).	
	EM	Condra et al. "In vivo emergence of HIV-1 variants resistant to multiple protease inhibitors" Nature 374:569-571 (1995).	
	EN	Dammer et al., "Specific antigen/antibody interactions measured by force microscopy," Biophysical Journal, 70:2437-2441 (1996).	
	EO	Dawson et al., "Peptide-derived self-assembled monolayers: adsorption of N-stearoyl L-Cysteine methyl ester on gold," Journal of Molecular Recognition, 10:18-25 (1997).	
	EP	Duschl et al., "Surface engineering: optimization of antigen presentation in self-assembled monolayers," Biophysical Journal, 70:1985-1995 (1996).	
	EQ	Dzgoev et al "Microformat imaging ELISA for pesticide determination" Anal. Chem. 68(19):3364 (1996).	
	ER	Ekins "Ligand assays" from electrophoresis to miniaturized microarrays Clin. Chem. 44(9):2015-2030 (1998).	
	ES	Elkins et al. "Multianalyte microspote immunoassay-microanalytical "compact disk" of the future" Clin. Chem. 37(11):1955-1967 (1991).	
	ET	Ellman et al., "Biosynthetic method for introducing unnatural amino acids site-specifically into proteins," Methods in Enzymology, 202:301-337 (1991).	
	EU	Geohegan et al. "Fluorescence-based continuous assay for the aspartyl protease of human immunodeficiency virus-1" FEBS 262:119-122 (1990).	
	EV	Hegner et al., "Immobilizing DNA on gold via thiol modification for atomic force microscopy imaging in buffer solutions," FEBS, 336(3):452-456 (1993).	
	EW	Hegner et al., "Modified DNA immobilized on bioreactive self-assembled monolayer on gold for dynamic force microscopy imaging in aqueous buffer solution," J. Vac. Sci. Technol. B, 14(2):1418-1421 (1996).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/046,442		
		Filing Date	October 27, 2001		
		First Named Inventor	Wagner, Peter		
		Art Unit	1641		
		Examiner Name	Chin, Christopher L.		
Sheet	6	of	8	Attorney Docket Number	020144-001970US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	EX	Hegner et al., "Ultralarge atomically flat template-stripped Au surfaces for scanning probe microscopy," Surface Science, 291:39-46 (1993).	
	EY	Ho et al. "Characterization of human immunodeficiency virus type 1 variants that encode viral proteases with decreased sensitivity to an inhibitor of the viral protease" Journal of Virology 68:2016-2020 (1994).	
	EZ	Hochuli et al., "Genetic approach to facilitate purification of recombinant proteins with a novel metal chelate adsorbent," Biotechnology, 6:1321-1325 (1988).	
	FA	Jacobson et al. "Fused quartz substrates for microchip electrophoresis" Anal. Chem. 67:2059-2063.	
	FB	Jones et al. "Microminaturized immunoassays using atomic force microscopy and compositionally patterned antigen arrays" Anal. Chem. 70(7):1223-1241 (1998).	
	FC	Kaplan et al. "Selection of multiple human immunodeficiency virus type 1 variants that encode viral proteases with decreased sensitivity to an inhibitor of the viral inhibitor" Proc. Natl. Acad. Sci. USA 91:5597-5601 (1994).	
	FD	Kemeny. Enzyme-linked immunoassays. In Immuno-Chemistry 1 (eds Johnstone and Turner). pp. 147-175, Nov. 1997.*	
	FE	Korant et al. "The HIV protease and therapies for aids" Adv. in Experimental Med. and Biol 421:279-284 (1997).	
	FF	Kricka "Miniaturization of analytical systems" Clin. Chem. 44(9):2008-2014 (1998).	
	FG	Lemmo et al., "Characterization of inkjet chemical microdispenser for combinatorial library synthesis," Anal. Chem., 69:543-551 (1997).	
	FH	Linford et al., "Alkyl monolayers on silicon prepared from 1-alkenes and hydrogen-terminated silicon," J. Am. Chem. Soc., 117:3145-3155 ((1995).	
	FI	Loeb et al. "Complete mutagenesis of the HIV-1 protease" Nature 340:397-400 (1989).	
	FJ	Louis et al. "Autoprocessing of the HIV-1 protease using purified wild-type and mutated fusion proteins expressed at high levels in Eschericia coli" Eur. J. Biochem. 199:361-369 (1991).	
	FK	Marks et al. "By-passing immunization- Human antibodies from V-gene libraries displayed on phage" J. Mol. Biol. 222:581-597 (1991).	
	FL	Martynova et al. "Fabricating of plastic microfluid channels by imprinting methods" Anal. Chem. 69:4783-47-89 (1997).	
	FM	Mauracher et al. Reduction of rubella ELISA background using heat denatured sample buffer. J. Immunol. Methods. 145:251-254, 1991.*	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	10/046,442	
			Filing Date	October 27, 2001	
			First Named Inventor	Wagner, Peter	
			Art Unit	1641	
			Examiner Name	Chin, Christopher L.	
			Attorney Docket Number	020144-001970US	
Sheet	7	of	8		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	FN	Moore et al. "Peptide substrates and inhibitors of HIV-1 protease" Biochem. Biophys. Res. Com. 159:420-425 (1989).	
	FO	Mrksich et al., "Controlling cell attachment on contoured surfaces with self-assembled monolayers of alkanethiolates on gold," Proc. Natl. Acad. Sci. USA, 93:10775-10778 (1996).	
	FP	Nock et al. (1997). Reversible, site specific immobilization of polyarginine-tagged fusion protein on mica surfaces. FEBS Letters. 414:233-238.	
	FQ	Noren et al., "A general method for site-specific incorporation of unnatural amino acids into proteins," Science, 244:182-188 ((1989).	
	FR	Pale-Grosdemange et al. (1991). Formation of self-assembled monolayers by chemisorption of derivatives of oligo(ethylene glycol) of structure HS(CH <sub>2</sub> ) <sub>11</sub> (OCH <sub>2</sub> CH <sub>2</sub> ) <sub>m</sub> OH on gold. J. Am. Chem. Soc. 113(1):12-20.*	
	FS	Prime et al., "Self-assembled organic monolayers: model systems for studying absorption of proteins at surfaces," Science, 252:1164-1167 (1991).	
	FT	Roberts et al. "Rationale design of peptide-based HIV proteinase inhibitors" Science 248:358-361 (1990).	
	FU	Rowe et al. "Array biosensor for simultaneous identification of bacterial, viral and protein analytes" Anal. Chem. 71(17):3846-3852 (1999).	
	FV	Schock et al. "Mutational anatomy of an HIV-1 protease variant conferring cross-resistance to protease inhibitors in clinical trials" J. Biol. Chem. 271:31957-31963 (1996).	
	FW	Sigal et al. "A self-assembled monolayer for the binding and study of histidine-tagged proteins by surface plasmon resonance" Anal. Chem 68:490-497 (1996).	
	FX	Silzel et al. "Mass-sensing, multianalyte microarray immunoassay with imaging detection" Clin. Chem. 44(9):2036-2043 (1998).	
	FY	Singhvi et al., "Engineering cell shape and function," Science, 264:696-698 (1994).	
	FZ	Skalka: Retroviral proteases: first glimpses at the anatomy of a processing machine Cell 56:911-913 (1989).	
	GA	Stennicke et al., "Biochemical characteristics of caspases-3, -6, -7, and -8," The Journal of Biological Chemistry, 272:25719-25723 (1997).	
	GB	Sundberg et al., "Spatially-addressable immobilization of macromolecules on solid supports," J. Am. Chem. Soc., 117:12050-12057 (1995).	
	GC	Talanian et al., "Substrate specificities of caspase family proteases," The Journal of Biological Chemistry, 272:9677-9682 (1997).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 8 of 8

**Complete if Known**

Application Number	10/046,442
Filing Date	October 27, 2001
First Named Inventor	Wagner, Peter
Art Unit	1641
Examiner Name	Chin, Christopher L.
Attorney Docket Number	020144-001970US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	GD	Thornberry, "Interleukin-1. beta. converting enzyme," Methods in Enzymology, 244:615-631 (1994).	
	GE	Villa et al., "Caspases and caspase inhibitors," TIBS, 22:388-393 (1997).	
	GF	Wagner et al., ". omega.-functionalized self-assembled monolayers chemisorbed on ultraflat Au(111) surfaces for biological scanning probe microscopy in aqueous buffers," J. Vac. Sci. Technol. B, 14(2):1466-1471 (1996).	
	GG	Wagner et al., "Bioreactive self-assembled monolayers on hydrogen-passivated Si(111) as a new class of atomically flat substrates for biological scanning probe microscopy," Journal of Structural Biology, 119:189-201 (1997).	
	GH	Wagner et al., "Covalent immobilization of native biomolecules onto Au(111) via N-hydroxysuccinimide ester functionalized self-assembled monolayers for scanning probe microscopy," Biophysical Journal, 70:2052-2066 (1996).	
	GI	Wagner et al., "Formation and in Situ modification of monolayers chemisorbed on ultraflat template-stripped gold surfaces," Langmuir, 11(10):3867-3875 (1995).	
	GJ	Weiner et al. "Site-directed mutagenesis of double-stranded DNA by the polymerase chain reaction" Gene 151:119-123 (1994).	
	GK	Wilson et al., "Structure and mechanism of interleukin-1. beta. converting enzyme," Nature, 370:270-275 (1994).	
	GL	Wondrak et al. "Influence of flanking sequences on the dimer stability of human immunodeficiency virus type 1 protease" Biochemistry 35:12957-12962 (1996).	
	GM	Wu et al. "Structural basis for specificity of retroviral proteases" Biochemistry 37:4518-4526 (1998).	
	GN	Pham, et al. "Human Interleukin-2 Production in Insect (Trichoplusia ni) Larvae: Effects and Partial Control of Proteolysis", Biotechnology and Bioengineering vol. 62(2) pp. 175-182; Jan. 20, 1999.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.